

IN THE SPECIFICATION:

Please amend paragraph [0050] of the original filed specification as follows:

-- [0050] The high-to-low switch controller 100 implements the decision of switching the resolution from high resolution to low resolution. In the preferred embodiment the high-to-low switch controller 100 consists of three comparators 101, 102 and 103, as shown in Figure 4, AND gate 104 and the OR gate 105. The inputs to the high-to-low switch controller 100 are the signals S111, S103 and S110. The comparator 101 compares the quantization scale estimate Q , available on signal S111, to a predetermined threshold T_Q and its output is set high if $Q > T_Q$. The comparator 102 compares the motion estimate M , available on signal S110, to a predetermined threshold T_M and its output is set high if $M > T_M$. The comparator 103 compares the decoder buffer level B_{dec} , available on signal S103, to a predetermined threshold T_B and its output is set high if $B_{dec} < T_B$. The outputs of comparators 101 and 102 are passed through the AND gate 104 and the result is ORed with the output of comparator 103. The output signal S120 of the OR gate 105 signifies the decision taken by the high-to-low switch controller. If the output is high, the resolution should be switched from high resolution to low resolution. Thus, in the preferred embodiment the high-to-low switch controller implements the following criterion switch from high resolution to low resolution if the following condition C_1 evaluates to true.

$$C_1 = \{ \{Q > T_Q\} \text{ AND } \{M > T_M\} \} \text{ OR } \{B_{dec} < T_B\}$$

--

Please amend paragraph [0053] of the original filed specification as follows:

-- [0053] The low-to-high switch controller 110 implements the decision of switching the resolution from low resolution to high resolution. The low-to-high switch controller 110 consists of three comparators 111, 112 and 113 and the AND gate 114. The inputs to the low-to-high switch controller 110 are the signals S111, S103, S105, S106 and S110. The comparator 111 computes the function $Q.M^2$, where Q and M are as aforementioned, and compares the value of this function to a preset threshold T_{QM} and sets its output high if $Q.Mz < T_Q$. The comparator 112

compares the current frame number, which information is available on S106, with the frame number at which the last scene change occurred, which information is available on S105. The output of the comparator 112 is set high if $F_{curr} - F_{sc} > T_{sc}$, where F_{curr} refers to the frame number of the current frame, F_{sc} refers to the frame number at which the last scene change occurred and T_{sc} refers to a fixed preset threshold. The comparator 113 compares the decoder buffer level B_{dec} , available on S103, to a predetermined threshold T_{B2} and its output is set high if $B_{dec} > T_{B2}$. The outputs of comparators 111, 112 and 113 are passed through the AND gate 114. The output S121 of gate 114 signifies the decision taken by the low-to-high switch controller 110. If the output is high, the resolution is to be switched from low resolution to high resolution. The low-to-high switch controller 110 implements a switch from low resolution to high resolution if the following condition C2 evaluates to true.

$$C_2 = \{Q.M^2 > T_{QM}\} \text{ \&\& \underline{AND} } \{B_{dec} > T_{B2}\} \text{ \&\& \underline{AND} } \{F_{curr} - F_{sc} > T_{sc}\}$$

--